

## AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph at page 34, lines 12-14 to read as follows:

**Proposition 6.1.** *For any real  $n \times n$  matrix  $A$  of determinant  $\pm 1$ , there is a bijection  $\psi: AZ^n \rightarrow Z^n$  which is optimal in the sense that  $\sup_{z \in AZ^n} \|\psi z - x\|$  is minimal over all such bijections.*

Please amend the paragraph at page 45, lines 11-18 to read as follows:

A number of the calculations presented earlier can be applied without change in the present context, given suitable definitions. In particular, we define the norm  $\|A\|$  of a signal transformation  $A$  (or the norm  $\|A(z)\|$  of its associated z-transform matrix) to be the supremum of  $\|Ax\|/\|x\|$  over all nonzero bounded inputs  $x$  (where  $\|x\|$  is defined as in the preceding section). Then, if  $A = A_1 A_2 \cdots A_k$  where each  $A_i$  can be approximated by an integer mapping  $\phi_i$  with error bound  $C_i$ , then  $A$  can be approximated by the composition of these integer mappings with error bound

$$(9.1) \quad C_1 + \|A_1\| C_2 + \|A_1\| \|A_2\| C_3 + \cdots + \|A_1\| \|A_2\| \cdots \|A_{k-1}\| C_k.$$